

## Fuel Tanks

Several fuel tanks are fabricated by skilled metal craftsmen, although most tanks are built. Custom and restoration tanks could be utilized on tractors, motorcycles, aircraft and automotive.

There are a series of particular requirements to be followed when constructing fuel tanks. Typically, the craftsman sets up a mockup in order to find out the accurate shape and size of the tank. This is normally done utilizing foam board. Afterward, design issues are handled, consisting of where the outlets, seams, drain, baffles and fluid level indicator would go. The craftsman must determine the alloy, temper and thickness of the metallic sheet he would utilize to be able to make the tank. When the metal sheet is cut into the shapes required, numerous parts are bent in order to create the basic shell and or the ends and baffles utilized for the fuel tank.

Numerous baffles in aircraft and racecars have "lightening" holes. These flanged holes have two purposes. They add strength to the baffles while reducing the weight of the tank. Openings are added toward the ends of construction for the drain, the fuel pickup, the filler neck and the fluid-level sending unit. Every now and then these holes are added when the fabrication process is complete, other times they are created on the flat shell.

After that, the baffles and ends can be riveted into place. The rivet heads are often soldered or brazed in order to avoid tank leaks. Ends could then be hemmed in and flanged and sealed, or brazed, or soldered making use of an epoxy kind of sealant, or the ends can even be flanged and afterward welded. After the brazing, welding and soldering has been completed, the fuel tank is checked for leaks.